

REMARKS

The specification has been amended to properly refer to the last Example in Table 2 as Example 25, rather than Example 22. It is clear that this was Applicants' intent, since the Examples are in order starting with Example 13, and there is already an Example 22 earlier in the table. Claims 1 and 8 have been amended. New claims 10-13 have been added. Thus, claims 1 and 4-13 are presented for examination. Support for the amendment to claim 1 may be found in the specification at page 3, paragraphs 4 and 6; page 5, paragraph 1; pages 12-13, Tables 1-2; and page 5, paragraph 2. Support for the amendment to claim 8 may be found in the specification at pages 12-13 (Tables 1-2). Support for the new claims may be found in the specification at page 3, paragraph 6; page 5, paragraph 2; page 5, paragraph 5; page 6, paragraph 3; pages 8-11 (Examples); and pages 12-14 (Tables 1-3). Thus, no new matter has been added. Reconsideration and withdrawal of the present rejections in view of the comments presented herein are respectfully requested.

Rejection under 35 U.S.C. 103(a)

The Examiner maintained his rejection of Claims 1 and 3-6 under 35 U.S.C. 103(a) as being obvious over Sato et al. (U.S. 5,985,525) in view of Kanda (2003/0091732). Claim 9 was also rejected under 35 U.S.C. 103(a) as being obvious over Sato et al. (U.S. 5,985,525) in view of Kanda (2003/0091732) and Takamiya (US 6,511,790).

The Examiner dismissed Applicants arguments regarding the unexpected results obtained with the claimed developer compositions presented in the response filed May 17, 2007 as not being commensurate in scope with the claims. Claim 1 has been amended to recite narrower component ranges which are fully supported by the specification, and which provide unexpected results as shown in Tables 1 and 2 of the specification. As discussed below, the new claims are commensurate in scope with the showing of unexpected results provided in the specification. The Examiner's points (1) to (8) on pages 6-7 of the Office Action are addressed below.

(1) The Examiner referred to "at least one broad embodiment in a claim, such as 0.0001% by mass of an organic quaternary ammonium base" as not providing the same result as the showing. Claim 1 as amended now excludes such a low amount of organic quaternary ammonium base, as the claim now recites that the quaternary ammonium base is present in an amount from 0.1 to 10% by mass, and thus, excludes an embodiment having the tiny amount of

organic quaternary ammonium base suggested by the Examiner. The limitation regarding quaternary ammonium base is further discussed in connection with point (3) below.

(2) The Examiner states that the claims must read on the excellent A to good B showings in Examples 1-22. These unexpected results are obtained when the range of components is as recited in amended claim 1: at least one of R₁ and R₂ represents an alkyl or alkoxy group having 5 to 15 carbon atoms and the other one represents a hydrogen atom, or an alkyl or alkoxy group having 5 to 15 carbon atoms; the anionic surfactant is present in an amount from 1,000 to 50,000 ppm; sulfate ion is present in an amount from 50 to 5,000 ppm; and the lower alcohol is present in an amount from 0.05 to 2.5% by mass. Thus, these limitations are now fully commensurate in scope with the showing of unexpected results.

(3) The Examiner alleges that the "claims have not been reasonably read on the use of about 2.38% by mass of tetramethyl ammonium as tested." While the examples use 2.38% tetramethylammonium hydroxide (TMAH) as the organic quaternary ammonium base, the specification makes clear that "the amount of the organic quaternary ammonium base is not specifically limited and is usually from 0.1 to 10% by mass." Specification at bottom of page 3. Moreover, the organic quaternary ammonium base has also now been limited in the claims to organic ammonium bases that have "a lower alkyl group or a lower hydroxyalkyl group, wherein the lower alkyl group or lower hydroxyalkyl group has 1 to 5 carbon atoms." The specification at page 3 also makes clear that the "organic quaternary ammonium base is not specifically limited as long as it is used in a developer composition resists and, for example, it is a quaternary ammonium base having a lower alkyl group or a lower hydroxyalkyl group." Thus, while TMAH is a preferred base, it is not required. In fact, Tables 1-3 show that the use of 2.38% TMAH is not critical since it is the other components that influence the dimensional controllability. Under these circumstances, there is no basis to require recitation of this specific amount of this specific organic quaternary ammonium base. Thus, the organic quaternary ammonium base and its amount recited in the claims are now fully commensurate in scope with the showing of unexpected results present in the specification.

(4) The Office Action states that the claims do not recite the use of about C₅ to C₁₅ in the anionic surfactant as tested. However, the claims as amended now recited that at least one of R₁ and R₂ represents an alkyl or alkoxy group having 5 to 15 carbon atoms and the other one

represents a hydrogen atom, or an alkyl or alkoxy group having 5 to 15 carbon atoms. Thus, this limitation is fully commensurate in scope with the showing of unexpected results.

(5) The Examiner states that the claims do not read on the use of about 1,000 to 50,000 ppm of C₅ to C₁₅ anionic surfactant. However, Claim 1 as amended now does recite 1,000 to 50,000 ppm of C₅ to C₁₅ anionic surfactant. Thus, this limitation is also commensurate in scope with the showing.

(6) The Office Action states that the claims have not been reasonably read on the use of about 700 to 5,000 ppm of sulfate ion as tested. Claim 1 as amended recites the use of 50 to 5,000 ppm sulfate ions. Although the results shown in Tables 1-2 use 700 to 5,000 ppm sulfate ions, one of ordinary skill in the art would recognize that similar results would be obtained if less than 700 ppm was used. In contrast, if more than 5,000 ppm was used, these unexpected results are less likely to occur since, as noted in Table 3, good results were not obtained when 20,000 ppm sulfate was used. Thus, the amended claim is commensurate in scope with the showing of unexpected results.

(7) The Office Action states that there is no criticality in using less than about 0.05 to more than about 2.5% by mass of a lower alcohol, citing Examples 13, 14, 15, 21 and 22. Accordingly, the claims have been amended to include 0.005% lower alcohol as the lower end of the range. This percentage is used in the examples referred to by the Examiner. Support for this amendment can be found in Tables 1-2, which provide a variety of percentages of lower alcohol within the presently recited range. Thus, the showing of unexpected results in the is now commensurate in scope with that of the claims.

(8) The Office Action states that there is no criticality in using less than about 300 or more than about 1,000 ppm of halogen ions. Firstly, halogen ions are not recited in claim 1 so this statement has no relevance to this claim. The amounts of halogen ions are provided in dependent Claims 8, 9 and 13. Since unexpected results have been shown for the composition of claim 1, then the claims additionally reciting the use of halogen ions are also nonobvious. Moreover, Claim 8 has been amended to recite the range of 300 to 2000 ppm of halogen, as supported in Tables 1-2 of the specification. The showing of unexpected results in the examples are now fully commensurate in scope with the dependent claims reciting this feature.

Therefore, the showings of unexpected results are clearly commensurate in scope with the claims and the specification. These unexpected results described above could not have been

predicted based upon the combination of Sato et al., Kanda et al., and Takamiya. Because the results obtained by Applicants were completely unexpected, Applicants' showing of unexpected results would effectively rebut any *prima facie* showing of obviousness resulting from combining Sato et al with Kanda and/or Takamiya. Accordingly, in view of the amendments and the comments presented above, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. 103(a).

CONCLUSION

Applicants submit that all claims are in condition for allowance. Should there be any questions concerning this application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below.

Respectfully submitted,

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